Amendments to the Claims

1. (canceled)

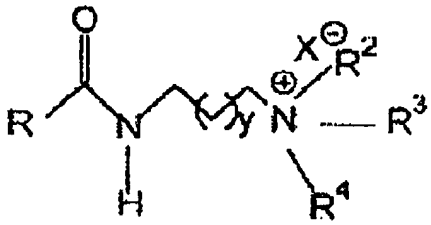
2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (currently amended) The ~~aqueous based fluid~~ method of Claim 15 wherein said cationic surfactant has the following general structure:



wherein R is saturated or unsaturated alkyl and y is an integer from 1 to 12.

7. (currently amended) The ~~aqueous based fluid~~method of Claim 6 wherein R has from about 6 to about 26 carbon atoms.

8. (currently amended) The ~~aqueous based fluid~~method of Claim 6 wherein R has from about 12 to about 22 carbon atoms.

9. (currently amended) The ~~aqueous based fluid~~method of Claim 6 wherein R is erucyl.

10. (currently amended) The ~~aqueous based fluid~~method of Claim 6 wherein y is 1.

11. (currently amended) The ~~aqueous based fluid~~method of Claim 1 wherein said cationic surfactant is isostearylamidopropylmorpholine.

12. (canceled)

13. (original) The ~~aqueous based fluid~~method of Claim 15 wherein said aqueous based hydraulic fracturing fluid has thermal stability of greater than about 85° C.

14. (canceled)

15. (currently amended) A method of fracturing a subterranean formation comprising the

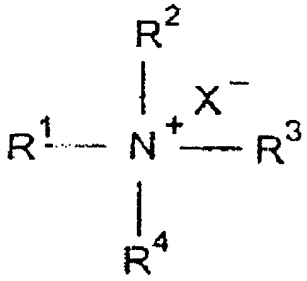
steps of:

I) providing a thickened aqueous based hydraulic fracturing fluid, comprising:

a) an aqueous medium; and

b) an effective amount of at least one ~~gelling agent~~cationic surfactant having the following

general structure:



wherein R^1 is alkylamine alkene or alkyl amidoalkene, R^2 and R^3 are each alkyl, hydroxyl alkyl, alkyl, hydroxyl alkyl, polyalkoxy with the degree of polymerization ranging from 2 to 30, hydroxyl alkyl sulfonate, alkyl sulfonate or alkylarylsulfonate; R^4 is hydrocarbon, saturated or unsaturated; or wherein any two of R^2, R^3 and R^4, together with the nitrogen atom to which they are attached, form a heterocyclic ring; and X is selected from the group consisting of halides; oxo ions of phosphorus, sulfur or chloride; and organic anions; and

c) at least one additive~~counterion~~ selected from ~~the group consisting of~~ organic salts, inorganic salts, organic acids, alcohols, and mixtures thereof; and

II. pumping the aqueous fracturing fluid through a wellbore and into a subterranean formation at a pressure sufficient to fracture the formation.

16. (currently amended) The method of Claim 15 wherein said fracturing fluid comprises at least one ~~counterion~~additive selected from organic acids, and/or organic salts.

17. (currently amended) The method of Claim 15 wherein said ~~counterion~~additive is selected from sulfates, sulfonates, or salicylates.

18. (original) The method of Claim 16 wherein said ~~counterion~~additive comprises at least one aromatic group.

19. (original) The method of Claim 16 wherein said ~~counterion~~additive is an aromatic sulfonate.

20. (original) The method of Claim 15 wherein said gel has a thermal stability up to temperatures of about 110° C.

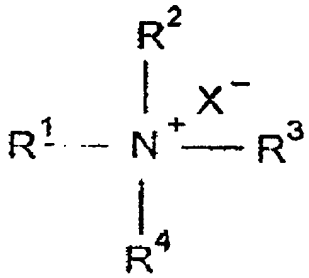
21. (original) The method of Claim 15 wherein said fracturing fluid has thermal stability of greater than about 90° C.

22. (original) The method of Claim 15 wherein said fracturing fluid comprises from about 0.05% to about 10% by weight of said cationic surfactant.

23. (currently amended) A well drilling operation, coil-tubing operation, construction operation, or mining operation which comprises ~~method of~~ suspending particles in a thickened aqueous liquid, the method comprising the steps of:

I) providing an aqueous medium; and

II) adding to said aqueous medium, an effective amount of at least one surfactant and at least one ~~counterion~~additive selected from the group consisting of organic salts, inorganic salts, organic acids, alcohols, and mixtures thereof, sufficient to increase the viscosity of said aqueous medium wherein said surfactant has the following having the following general structure:



wherein R^1 is alkylamine alkene or alkylamine alkene or alkyl amidoalkene, R^2 and R^3 are each alkyl, hydroxyl alkyl, alkyl, hydroxyl alkyl, poyalkoxy with the degree of polymerization ranging from 2 to 30, hydroxyl alkyl sulfonate, alkyl sulfonate or alkylarylsulfonate; R^4 is hydrocarbon, saturated or unsaturated; or wherein any two of R^2, R^3 and R^4, together with the nitrogen atom to which they are attached, form a heterocyclic ring; and X is selected from the group consisting of halides; oxo ions of phosphorous, sulfur or chloride; and organic anions,

wherein said aqueous liquid is sufficiently thickened to suspend solid particulate matter, and wherein said particulate matter is cutting material, proppant material or mixtures thereof.

24. (original) The method of Claim 23 further comprising transporting the suspension of solid particulate matter in said aqueous liquid to a remote location.

25. (canceled)

26. (canceled)

27. (canceled)

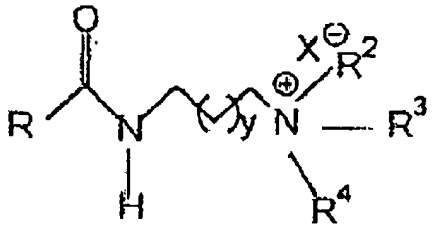
28. (canceled)

29. (canceled)

30. (original) A method of reducing the friction exhibited by an aqueous liquid during flow through a conduit comprising the steps of:

a) providing an aqueous medium;

b) contacting said aqueous medium with a friction reducing amount of a viscoelastic surfactant having the following general structure:



wherein R is saturated or unsaturated alkyl and y is an integer from 1 to 12, and an additive selected from the group consisting of inorganic salts, organic salts, organic acids, alcohols, and mixtures thereof; and

c) passing said a aqueous fluid through said conduit;

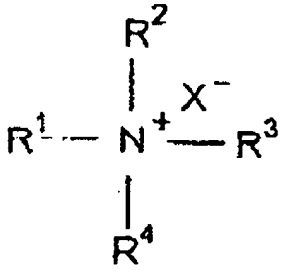
wherein said viscoelastic surfactant and said additive are present in an amount capable of reducing the friction exhibited by said aqueous liquid as said aqueous liquid passes through said conduit.

31. (currently amended) An oil field high brine completion fluid comprising:

a) about 30 wt-% to about 70 wt-% of at least one inorganic or organic salt~~slat~~;

and

b) about 0.1 wt-% to about 4 wt-% at least one cationic surfactant having the following general structure:



wherein R^1 is alkyl amine alkylene or alkyl amido alkylene; R^2 and R^3 are each alkyl, hydroxyl alkyl, polyalkoxy with the degree of polymerization ranging from 2 to 30, hydroxyl alkyl sulfonate, alkyl sulfonate or alkylarysulfonate; R^4 is hydrocarbon, saturated or unsaturated; or wherein any two of R^2, R^3, and R^4,

together with the nitrogen atom to which they are attached, from a heterocyclic ring; and X^- is selected from the group consisting of halides; oxo ions of phosphorous, sulfur or chloride; and organic anions.

32. (previously presented) The fluid of Claim 31 further comprising at least one additive selected from inorganic salts, organic salts, organic acids, alcohols, or mixtures thereof.

33. (previously presented) The fluid of Claim 31 wherein the viscosity of said fluid increases when the temperature is increased and decreases when the temperature is decreased.

34. (new) The method of claim 15 wherein said cationic surfactant is erucyl amidopropyltrimethyl ammonium quaternary salt, and said additive is sodium xylene sulfonate.

35. (new) The method of claim 23 wherein said cationic surfactant is erucyl amidopropyltrimethyl ammonium quaternary salt, and said additive is sodium xylene sulfonate.

36. (new) The high brine completion fluid of claim 32 wherein said cationic surfactant is erucyl amidopropyltrimethyl ammonium quaternary salt, and said additive is sodium xylene sulfonate.